DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 99.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-022162 Address: 333 Burma Road **Date Inspected:** 25-Mar-2011

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC) Chanxing Island **Location:** Shanghai, China

CWI Name: Mr. LI YANG **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component: OBG Segment**

Summary of Items Observed:

On this date CALTRANS OSM Quality Assurance (QA) Inspector Santhosh Ramakrishna Pillai was present during the times noted above for observations relative to fabrication work of the Self Anchored Suspension (SAS) Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China.

This QA inspector randomly observed the following work:

1. INPROCESS:

Orthotropic Box Girder (OBG) at Trial Assembly Area:

ZPMC welding personnel performing Shielded Metal Arc Welding of Fillet welds joining the barrier diverter plate to deck plate weld joint located on 12AE at cross beam side, Panel Point (PP-109). The weld is designated as OBE12G-106 & 107. The welder is identified as 044504. ZPMC QC Mr. WANG LI YANG was onsite monitoring the welding variables. The inprocess Shielded Metal Arc Welding appears to be progressing in compliance with WPS-B-P-2112.

ZPMC welding personnel performing Shielded Metal Arc Welding of Complete Joint Penetration welds joining the barrier diverter plate to barrier diverter plate weld joint located on 12AE+12BE at cross beam side, Panel Point (PP-112.5 to 113). The weld is designated as OBE12G-101, 102. The welder is identified as 044504. ZPMC QC

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Mr. WANG LI YANG was onsite monitoring the welding variables. The inprocess Shielded Metal Arc Welding appears to be progressing in compliance with WPS-B-P-2213-B-U2-FCM-1.

ZPMC welding personnel performing Shielded Metal Arc Welding of Complete Joint Penetration welds joining the barrier diverter plate to barrier diverter plate weld joint located on 12AE at cross beam side, Panel Point (PP-109). The weld is designated as OBE12G-100. The welder is identified as 044504. ZPMC QC Mr. WANG LI YANG was onsite monitoring the welding variables. The inprocess Shielded Metal Arc Welding appears to be progressing in compliance with WPS-B-P-2213-B-U2-FCM-1.

ZPMC welding personnel performing Shielded Metal Arc Welding of Fillet welds joining the barrier diverter plate to edge plate weld joint located on 12CE at cross beam side, Panel Point (PP-117 to 117.5). The weld is designated as OBE12G-018 & 019. The welder is identified as 044504. ZPMC QC Mr. WANG LI YANG was onsite monitoring the welding variables. The inprocess Shielded Metal Arc Welding appears to be progressing in compliance with WPS-B-P-2113.

ZPMC welding personnel performing Shielded Metal Arc Welding of Complete Joint Penetration welds joining the floor beam plate to side plate weld joint located on 13AW at cross beam side, Panel Point (PP-119). The weld is designated as SEG3013AD-012. The welder is identified as 069683. ZPMC QC Mr. ZHANG QIANG was onsite monitoring the welding variables. The inprocess Shielded Metal Arc Welding appears to be progressing in compliance with WPS-B-P-2214-TC-U4b-FCM-1.

ZPMC welding personnel performing Shielded Metal Arc Welding of Complete Joint Penetration welds joining the edge plate to deck plate hold back weld joint located on 13AW at cross beam side. The weld is designated as SEG3013AA-109. The welder is identified as 069683. ZPMC QC Mr. ZHANG QIANG was onsite monitoring the welding variables. The inprocess Shielded Metal Arc Welding appears to be progressing in compliance with WPS-B-P-2214-TC-U4b-FCM-1.

2. NDT:

Magnetic Particle Testing (MT):

MT carried out as per the ZPMC submitted Notification No 08627.

This QA Inspector performed Magnetic Particle Testing (MT) of approximately 15% of the area that has been previously tested and accepted by ZPMC MT technicians. This QA Inspector generated a TL-6028 MT report on this date. The members are identified as butt joint between partial diaphragm weld joint located on 12AE at cross beam side. The weld designation numbers is as follows: SEG3001AG-174, 137, 117, 100, 047, 032.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

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No relevant conversations were reported on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 150-0042-2372, who represents the Office of Structural Materials for your project.

Inspected By:	Pillai,Santosh	Quality Assurance Inspector
Reviewed By:	Miller,Mark	QA Reviewer